

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

### LISTING OF CLAIMS

1. (currently amended) A housing adapted to receive a circuit board, the housing comprising:
  - a housing body;
  - first and second slots formed in the housing body and located proximate the ends of the housing body, for guiding the circuit board into place and retaining the circuit board after the circuit board has been installed into a final position within the housing body; and
  - a deflection/retention feature located between the first and second slots, the deflection/retention feature extending above a plane formed by the circuit board when the circuit board has been installed into the final position within the housing body, wherein the deflection/retention feature flexes the circuit board when ends of the circuit board are first inserted into the first and second slots and the circuit board is being slid into place, and retains the circuit board after the circuit board snaps into place and returns to a substantially flat state.
2. (original) The housing of claim 1 wherein one or both of the first and second slots include a lower surface that extends farther from a front of the housing body than an upper surface, thereby simplifying initial alignment of the circuit board into the slot.
3. (original) The housing of claim 1 and further comprising a curved guide proximate at least one of the first and second slots, for urging the circuit board toward one of the first or second slots after the circuit board has been inserted in the other of the first or second slots and while the circuit board is being flexed by the deflection/retention feature
4. (original) The housing of claim 1 and further comprising a curved guide proximate the deflection/retention feature, for urging the circuit board toward the final position as the circuit board is slid into place.
5. (original) The housing of claim 1 and further comprising one or more supports that help retain the circuit board within the housing body after the circuit board was reached the final

position within the housing body

6. (currently amended) A housing adapted to receive a circuit board, the housing comprising

- a housing body;

- first and second slots formed in the housing body and located proximate the ends of the housing body, for guiding the circuit board into place and retaining the circuit board after the circuit board has been installed into a final position within the housing body, will, one or both of the first and second slots including a lower surface that extends farther from a front of the housing body than an upper surface, thereby simplifying initial alignment of the circuit board into the slot;

- a deflection/retention feature located between the first and second slots, tile deflection/retention feature extending above a plane formed by the circuit board when the circuit board has been installed into the final position within the housing body, wherein the deflection/retention feature flexes the circuit board when ends of tile circuit board are first inserted into tile first and second slots and tile circuit board is being slid into place, and retains tile circuit board after the circuit board snaps into place and returns to a substantially flat state;

- a first curved guide proximate at least one of the first and second slots, for urging the circuit board toward one of tile first or second slots after the circuit board has been inserted in the other of the first or second slots and while the circuit board is being flexed by the deflection/retention feature;

- a second curved guide proximate tile deflection/retention feature, for urging the circuit board toward the final position as the circuit board is slid into place; and one or more supports that help retain the circuit board within the housing body a tier the circuit board has reached tile final position within the housing body.

7. (currently amended) An assembly comprising;

- a circuit board comprising;

- a plurality of components mounted on the circuit board; and

- a connector for electrically coupling the plurality of components to other circuits when the assembly is attached to a system; and

- a housing body comprising;

first and second slots formed in the housing body and located proximate the ends of the housing body, for guiding the circuit board into place and retaining the circuit board after the circuit board has been installed into a final position within the housing body; and a deflection/retention feature located between the first and second slots, the deflection/retention feature extending above a plane formed by the circuit board when the circuit board has been installed into the final position within the housing body, wherein the deflection/retention feature flexes the circuit board when ends of the circuit board are first inserted into the first and second slots and the circuit board is being slid into place, and retains the circuit board after the circuit board snaps into place and returns to a substantially flat state.

8. (original) The assembly of claim 7 wherein one or both of the first and second slots of the housing body include" lower surface that extends farther from a from of the housing body than an upper surface, thereby simplifying initial alignment of the circuit board into the slot.

9. (original) The assembly claim 7 wherein the housing body further comprises a curved guide proximate at least one of the first and second slots, for urging the circuit board toward one of the first or second slots after the circuit board has been inserted in the other of the first or second slots and while the circuit board is being flexed by the deflection/retention feature.

10. (original) The assembly of claim 7 wherein the housing body further comprises a curved guide proximate the deflection/retention feature, for urging the circuit board toward the final position as the circuit board is slid into place.

11. (original) The assembly of claim 7 wherein the housing body further comprises one or more supports that help retain the circuit board within the housing body after the circuit board has reached the final position within the housing body.

12. (original) The assembly of claim 7 wherein the connector of the circuit board is guided toward a connector of opposite gender on the system using one or more alignment posts and one or more corresponding holes, wherein the one or more alignment posts and the one or more corresponding holes are distributed among the connector or the circuit board and the connector of opposite gender on the system.

13. (original) The assembly of claim 12 wherein the alignment posts are tapered.

14. (currently amended) An assembly comprising:

a circuit board comprising;

a plurality of components mounted on the circuit board; and

a connector for electrically coupling the plurality of components to other circuit board is guided toward a connector of opposite gender on the system using one or more tapered alignment posts and one or more corresponding holes, wherein the one or more alignment posts and the one or more corresponding holes are distributed among the connector of the circuit board and the connector of opposite gender on the system; and a housing body comprising;

first and second slots formed in the housing body and located proximate the ends of the housing body, for guiding the circuit board into place and retaining the circuit board after the circuit board has been installed into a final position within the housing body, wherein one or both of the first and second slots of the housing body include a lower surface that extends farther from a front of the housing body than an upper surface, thereby simplifying initial alignment of the circuit board into the slot:

a deflection/retention feature located between the first and second slots, the deflection/retention feature extending above a plane formed by the circuit board when the circuit board has been installed into the final position within the housing body, wherein the deflection/retention feature flexes the circuit board when ends of the circuit board are first inserted into the first and second slots and the circuit board is being slid into place, and retains the circuit board after the circuit board snaps into place and returns to a substantially flat state;

a first curved guide proximate at least one of the first and second slots, for urging the circuit board toward one or the first or second slots after the circuit board has been inserted in the other of the first or second slots and while the circuit board is being flexed by the deflection/retention feature;

a second curved guide proximate the deflection/retention feature, for urging the circuit board toward the final position as the circuit board is slid into place; and

one or more supports that help retain the circuit board within the housing body after the circuit board has reached the final position within the housing body.

15. (currently amended) A method of assembling a circuit board into a housing to form an assembly comprising:

inserting a first end of the circuit board into a first slot of the housing;  
flexing the circuit board over a deflection/retention feature;  
inserting a second end of the circuit board into a second slot of the housing; and  
pressing the circuit board into place until the circuit board clears the deflection/retention feature and snaps into place, thereby returning a substantially flat state wherein the first slot and the second slot is formed in a body of the housing and are located proximate the ends of the body of the housing.

16. (original) The method of claim 15 wherein inserting a first end of the circuit board into a first slot of the housing and inserting a second end of the circuit board into a second slot of the housing each include simplifying initial alignment of the circuit board into the slot by first contacting a lower surface of the slot that extends farther from a front of the housing than an upper surface of the slot.

17. (original) The method of claim 15 wherein inserting a second end of the circuit board into a second slot of the housing includes engaging a curved guide proximate the second slot that urges the circuit board toward the second slot.

18. (original) The method of claim 15 wherein pressing the circuit board into place until the circuit board clears the deflection/retention feature and snaps into place includes engaging a curved guide proximate the deflection/retention feature that urges the circuit board toward a final position.

19. (original) The method of claim 15 wherein pressing the circuit board into place until the circuit board clears the deflection/retention feature and snaps into place includes engaging one or more supports of the housing that help retain the circuit board within the housing after the circuit board has reached a final position within the housing.

20. (original) The method of claim 15 and further comprising:

attaching the assembly to a system by:  
guiding a connector of the circuit board toward a connector of opposite gender on the system using one or more alignment posts and one or more corresponding holes, wherein the one or more alignment posts and the

one or more corresponding holes are distributed among the connector or the circuit board and the connector or opposite gender on the system; and fastening the housing to the system.

21. (original) The method of claim 20 wherein the alignment posts are tapered.

22. (currently amended) A method of assembling a circuit board into a housing to form an assembly, and fastening the assembly to a system comprising:

inserting a first end of the circuit board into a first slot of the housing by first contacting a lower surface of the first slot that extends farther from a front of the housing than an upper surface of the first slot;

flexing the circuit board over a deflection/retention feature by engaging a first curved guide proximate a second slot that urges the circuit board toward the second slot;

inserting a second end of the circuit board into the second slot of the housing by first contacting a lower surface of the second slot that extends farther from a front of the housing than an upper surface of the second slot wherein the first slot and the second slot is formed in a body of the housing and are located proximate the ends of the body of the housing;

pressing the circuit board into place to engage a second curved guide proximate the deflection/retention feature that urges the circuit board toward a final position until the circuit board clears the deflection/retention feature and snaps into place and engages one or more supports that help retain the circuit board within the housing, with the circuit board returning to a substantially flat state; and attaching the assembly to a system by:

guiding the circuit board toward a connector of opposite gender on the system using one or more tapered alignment posts and one or more corresponding holes, wherein the one or more alignment posts and the one or more corresponding holes are distributed among the connector of the circuit board and the connector of opposite gender on the system; and

fastening the housing to the system.